

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003589**Date Inspected:** 28-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

OBG Assembly Bay

Segment 5AE – No ZPMC personnel was observed working on the segment.

Segment 5BE – No ZPMC personnel was observed working on the segment.

Segment 5CE – The Quality Assurance Inspector observed ZPMC performing miscellaneous grinding to the side panels.

Segment 3AE – The Quality Assurance Inspector observed where ZPMC performed base metal repairs to the web portion of “T” stiffeners at Side Panels SP-75A, SP-51A, SP-39A, and SP-63A. It appears the damage occurred while beveling the side panel adjacent complete joint penetration weld. ABF informed the Quality Assurance Inspector that Critical Weld Repair (CWR) Reports had been submitted and approved. The Quality Assurance Inspector discovered the CWR did not cover Side Panel SP-039-001. Quality Assurance Task Leader David McClary requested that a CWR be submitted after the fact. Below is a digital photograph illustrating the base metal repair.

Segment 3BE – No ZPMC personnel was observed working on the segment.

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Segment 4AE – The Quality Assurance Inspector observed a ZPMC welding operator performing in progress welding joining Longitudinal Diaphragm plate LD-006-001 to Floor Beam FB-002-003. The welder was utilizing the shielded metal arc welding process to produce the complete joint penetration weld in the vertical position.

Segment 4BE – No ZPMC personnel was observed working on the segment.

The Quality Assurance Inspector observed ZPMC in the process of fitting up and tack welding three corner assemblies for various segments utilizing the shielded metal arc welding process.

Segment 5CW – The Quality Assurance Inspector observed an excessive root opening at weld SSD13-036-135. The Quality Assurance Inspector informed ZPMC Quality Control Inspector and of the requirements of D1.5 2002 section 3.3.4.1 which states “Root openings wider than those allowed in 3.3.4, but not greater than twice the thickness of the thinner part or 20 mm [3/4 in.], whichever is less, may be corrected by welding to acceptable dimensions prior to joining the parts by welding.” The QC Inspector relayed he would inform his supervisors.

Segment 5BW – No ZPMC personnel was observed working on the segment.

Segment 4BW – The Quality Assurance Inspector observed the weld access holes at complete joint penetration web splices at Side Panels SP-062-001 and SP-74-001 contained radiuses on only one of the two plates. Below is a digital photograph illustrating the as built condition.



Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco(707) 552 7715, who represents the Office of Structural Materials for your project.

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Inspected By: Bertlesman,Greg

Quality Assurance Inspector

Reviewed By: Lanz,Joe

QA Reviewer